

April 13, 1953

(P.S. to 4/11).

Dear Phil:

Over the weekend, a most surprising result that promises to clear up the #157 story. The notion had just occurred to me, and some other more conclusive tests are in progress. However, I thought I better send you SW 1026 right away for your verification as IV V XII i:b (sic).

This comes from SW 623 (IV V XII i:—, the i originally from TM—x SW666) to repeat, SW623 —x N97 (java b:—, or b:1,2), in b serum. An i phase came out, as expected, but after purification (now repeated) it gives b when selected in i serum.

The only way this makes sense at all ~~if-if~~ is if ~~MacLeod's~~ N97 (and presumably N25, which is very similar) are 1,2..ib. That is, they show phase variation between the two factors, ~~the~~ but the genetic homologies have somehow been reversed, so that this 1,2 (as already established) is homologous with the typical specific phases, while the b is homologous with typical nonspecific phases.

A better test of this will be N97 —x S. miami, to see whether one gets b:1,5 (a typical result, cf. SW1011) or a:b (expected on this hypothesis). If so, it will be possible to dispense with the idea that b is mutating to 1,2, which was becoming uncomfortable in view of the reversibility of the lp2 from N97. These experiments have been done with an N97 single colony derivative, and further study of the original stock will be needed (as requested previously).

SW 1023 just sent you is probably ~~supposed to be~~ an artificial phase.

SW 986 is now ~~behav-~~ behaving differently from before. ~~It seems to react~~
~~ite-~~ But I'd appreciate your looking at it anyhow.

I've just looked at SW674 phase 2, and do not see the gp reaction. But I have neither your isolate nor your serum. I'll send you my isolate after I purify and check it again.

Sincerely,